

Fig. 1A

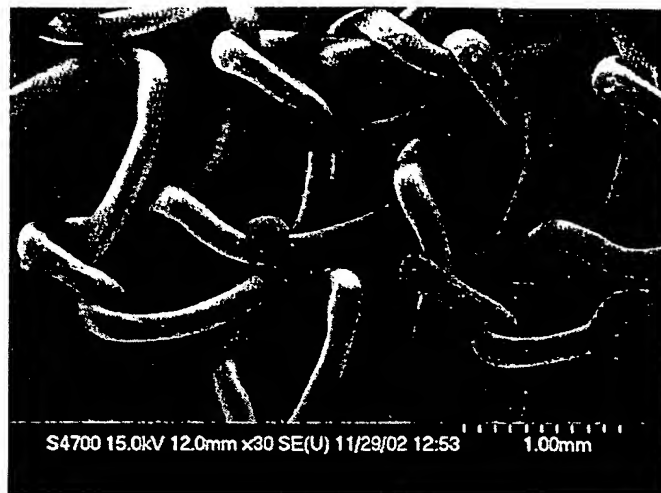


Fig. 1B

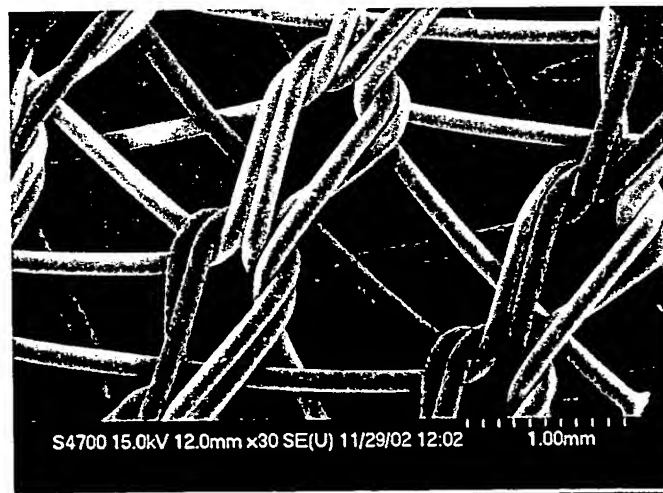


Fig. 1C

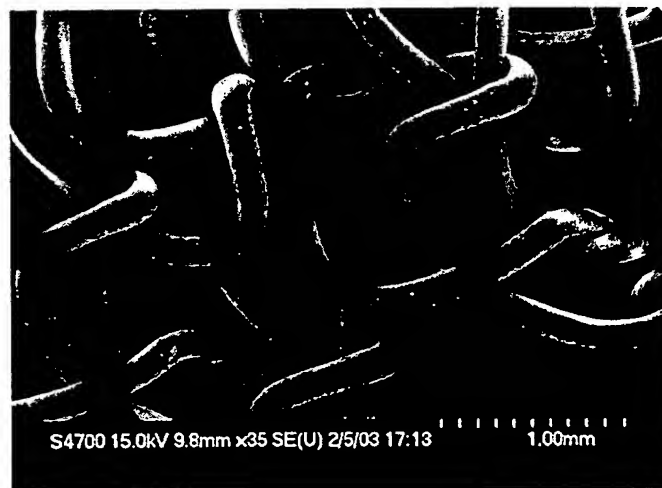


Fig. 2A

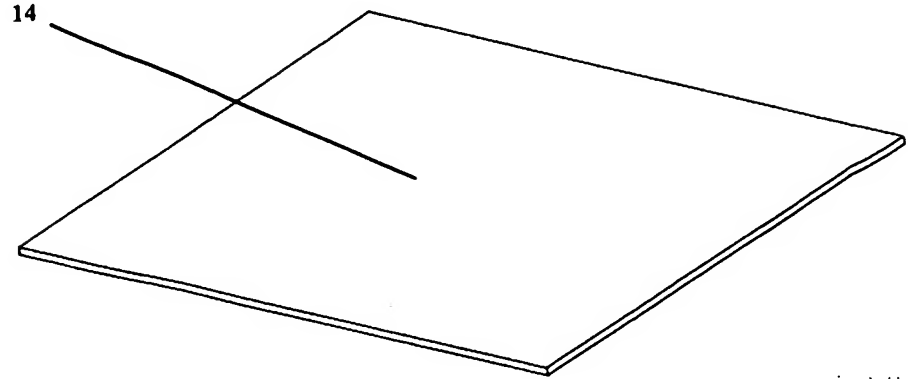


Fig. 2B

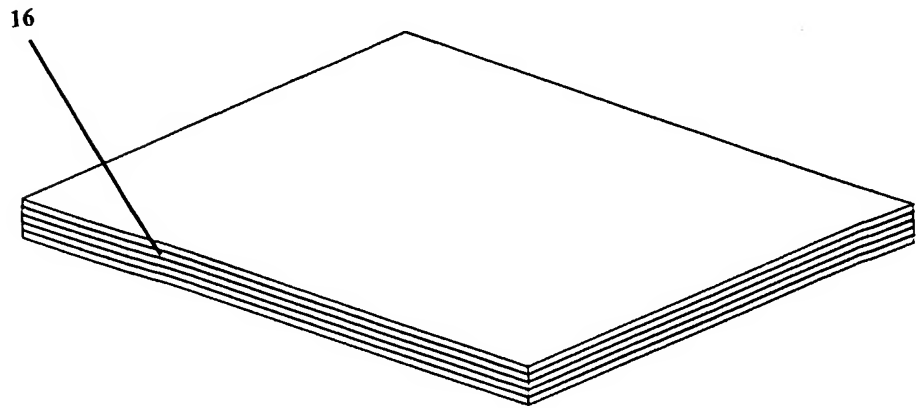


Fig. 2C

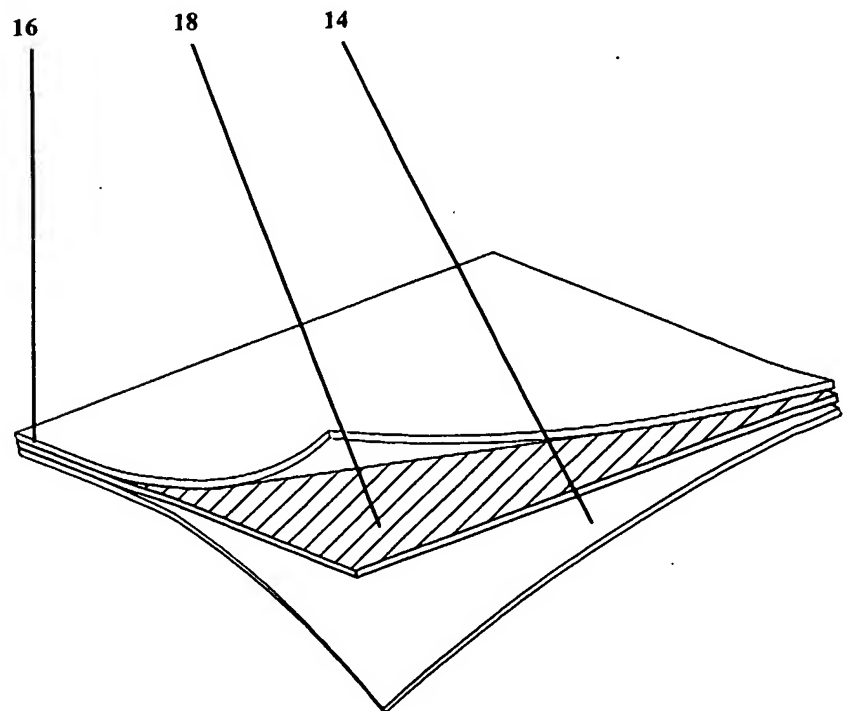


Fig. 3A

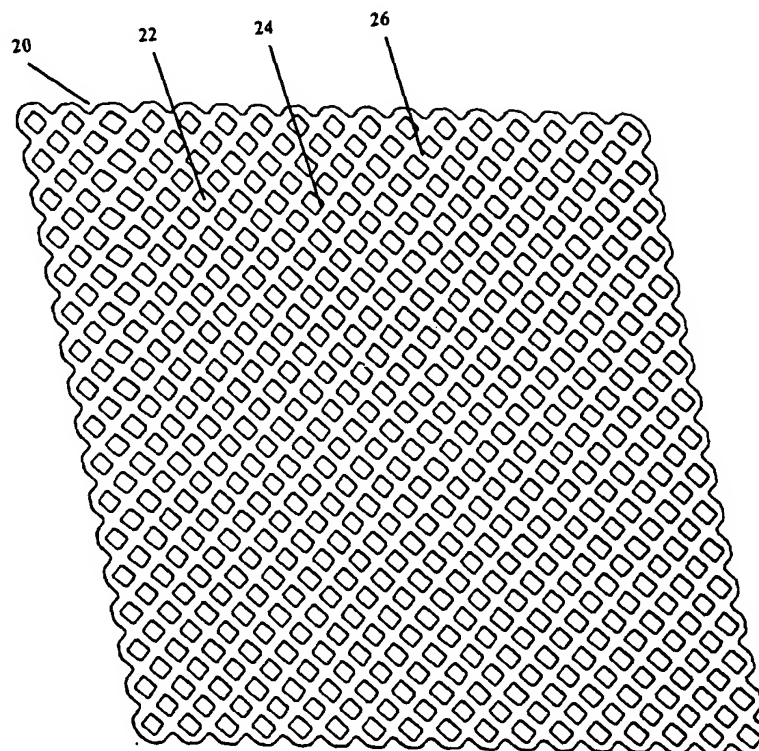


Fig. 3B

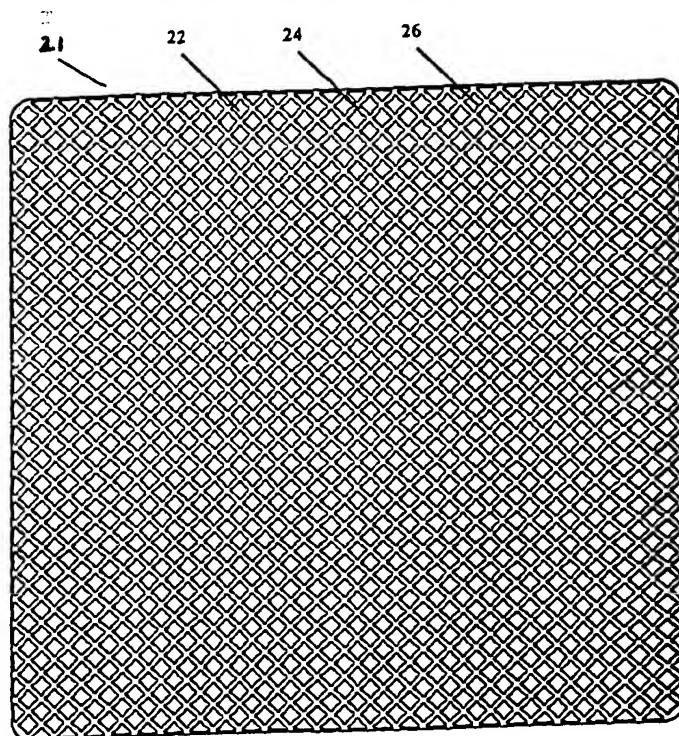


Fig. 4A

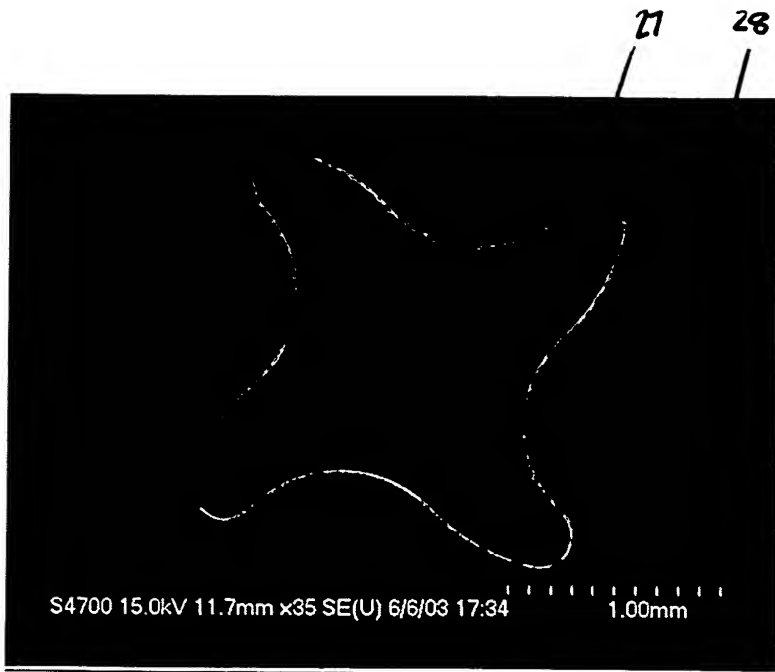


Fig. 4B

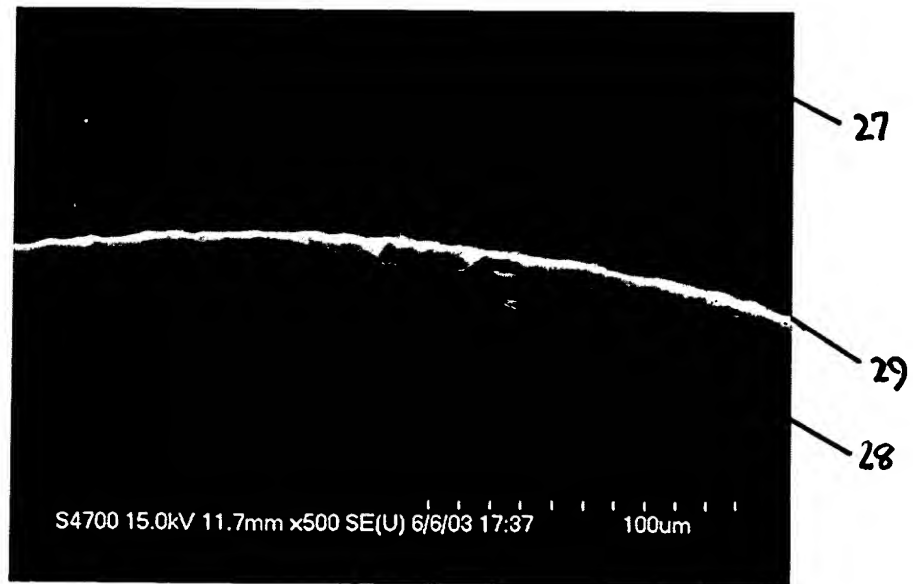


Fig. 5

Method for producing soft tissue implant

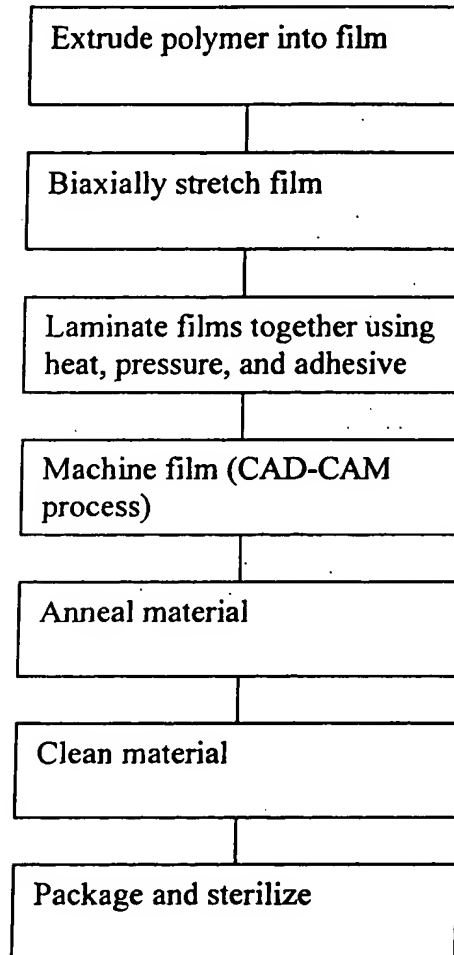


Fig. 6A

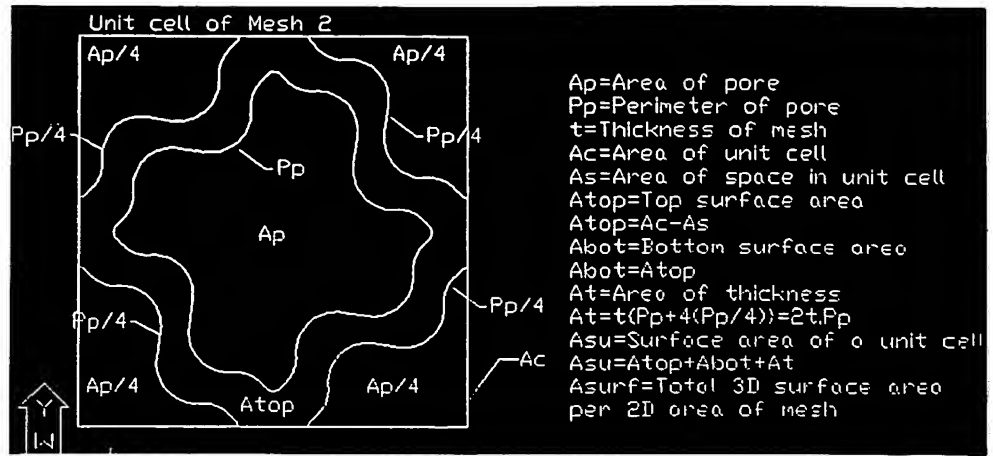


Fig. 6B

Method for Calculating Mesh2 Surface Area

Area of pore	Ap	10.89	mm ²
Perimeter of pore	Pp	15.08	mm
Thickness	t	0.20	mm
Area of unit cell	Ac	31.00	mm ²

Area of space in unit cell	As=Ap+4(Ap/4)=2Ap	21.78	mm ²
Top surface area	Atop=Ac-As	9.22	mm ²
Bottom surface area	Abot=Atop	9.22	mm ²
Area of thickness	At=t(Pp+4(Pp/4))	6.03	mm ²

3D surface area of a unit cell	Asu=Atop+Abot+At	24.47	mm ²
Surface area ratio	Asurf=Asu/Ac	0.79	

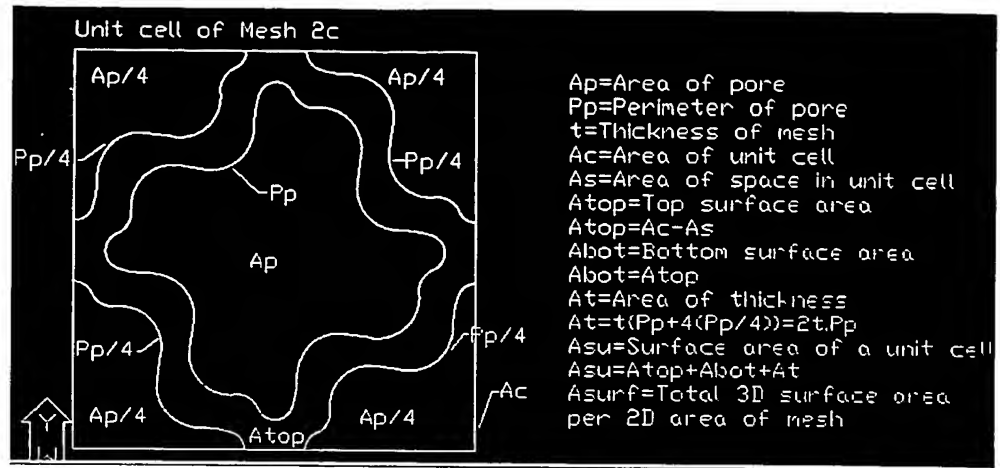
Fig. 7A



Fig. 7B



Fig. 8A



Method for Calculating Mesh2C Surface Area

Fig. 8B

Area of pore	A_p	2.78	mm ²
Perimeter of pore	P_p	7.83	mm
Thickness	t	0.20	mm
Area of unit cell	A_c	7.75	mm ²

Area of space in unit cell	$A_s = A_p + 4(A_p/4) = 2A_p$	5.56	mm ²
Top surface area	$A_{top} = A_c - A_s$	2.19	mm ²
Bottom surface area	$A_{bot} = A_{top}$	2.19	mm ²
Area of thickness	$A_t = t(P_p + 4(P_p/4))$	3.13	mm ²

3D surface area of a unit cell	$A_{su} = A_{top} + A_{bot} + A_t$	7.51	mm ²
Surface area ratio	$A_{surf} = A_{su}/A_c$	0.97	

Fig. 9A

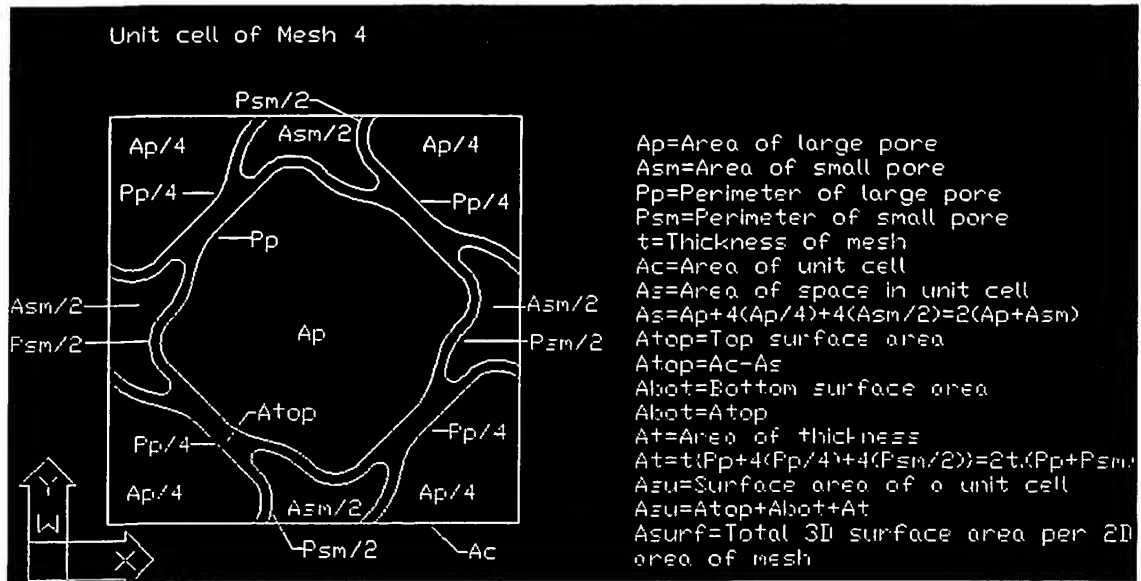


Fig. 9B

Method for Calculating Mesh4 Surface Area

<u>Area of large pore</u>	<u>Ap</u>	<u>11.17</u>	<u>mm²</u>
<u>Perimeter of large pore</u>	<u>Pp</u>	<u>12.47</u>	<u>mm</u>
<u>Area of small pore</u>	<u>Asm</u>	<u>2.20</u>	<u>mm²</u>
<u>Perimeter of small pore</u>	<u>Psm</u>	<u>8.09</u>	<u>mm</u>
<u>Thickness</u>	<u>t</u>	<u>0.20</u>	<u>mm</u>
<u>Area of unit cell</u>	<u>Ac</u>	<u>31.00</u>	<u>mm²</u>

<u>Area of space in unit cell</u>	<u>As=Ap+4(Ap/4)+4(Asm/2)=2(Ap+Asm)</u>	<u>26.74</u>	<u>mm²</u>
<u>Top surface area</u>	<u>Atop=Ac-As</u>	<u>4.26</u>	<u>mm²</u>
<u>Bottom surface area</u>	<u>Abot=Atop</u>	<u>4.26</u>	<u>mm²</u>
<u>Area of thickness</u>	<u>At=t(Pp+4(Pp/4)+4(Psm/2))=2t.(Pp+Psm)</u>	<u>8.22</u>	<u>mm²</u>

<u>3D surface area of a unit cell</u>	<u>Asu=Atop+Abot+At</u>	<u>16.74</u>	<u>mm²</u>
<u>3D surface area per 2D unit cell area</u>	<u>Asurf=Asu/Ac</u>	<u>0.54</u>	

Fig. 10A

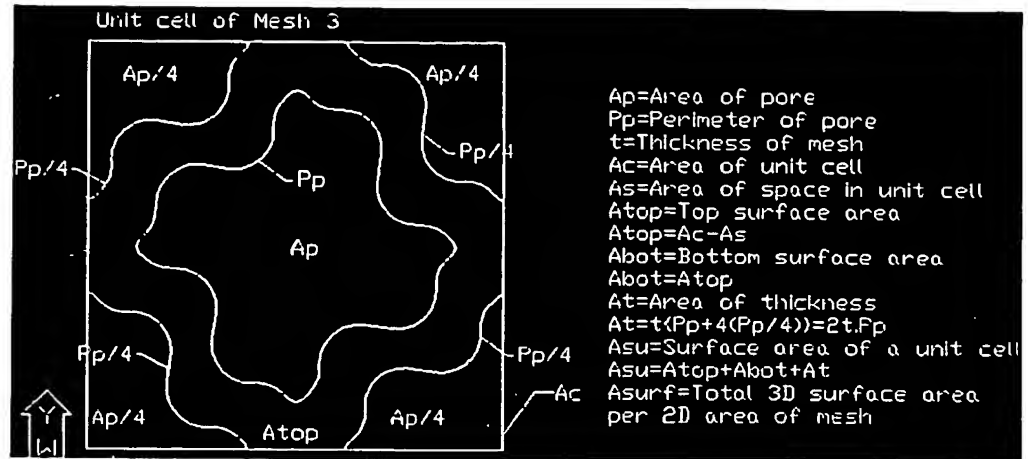


Fig. 10B

Method for Calculating Mesh3 Surface Area

Area of pore	A_p	10.89	mm ²
Perimeter of pore	P_p	15.08	mm
Thickness	t	0.20	mm
Area of unit cell	A_c	35.48	mm ²

Area of space in unit cell	$A_s = A_p + 4(A_p/4) = 2A_p$	21.78	mm ²
Top surface area	$A_{top} = A_c - A_s$	13.70	mm ²
Bottom surface area	$A_{bot} = A_{top}$	13.70	mm ²
Area of thickness	$A_t = t(P_p + 4(P_p/4))$	6.03	mm ²

3D surface area of a unit cell	$A_{su} = A_{top} + A_{bot} + A_t$	33.43	mm ²
Surface area ratio	$A_{surf} = A_{su}/A_c$	0.94	

Fig. 11

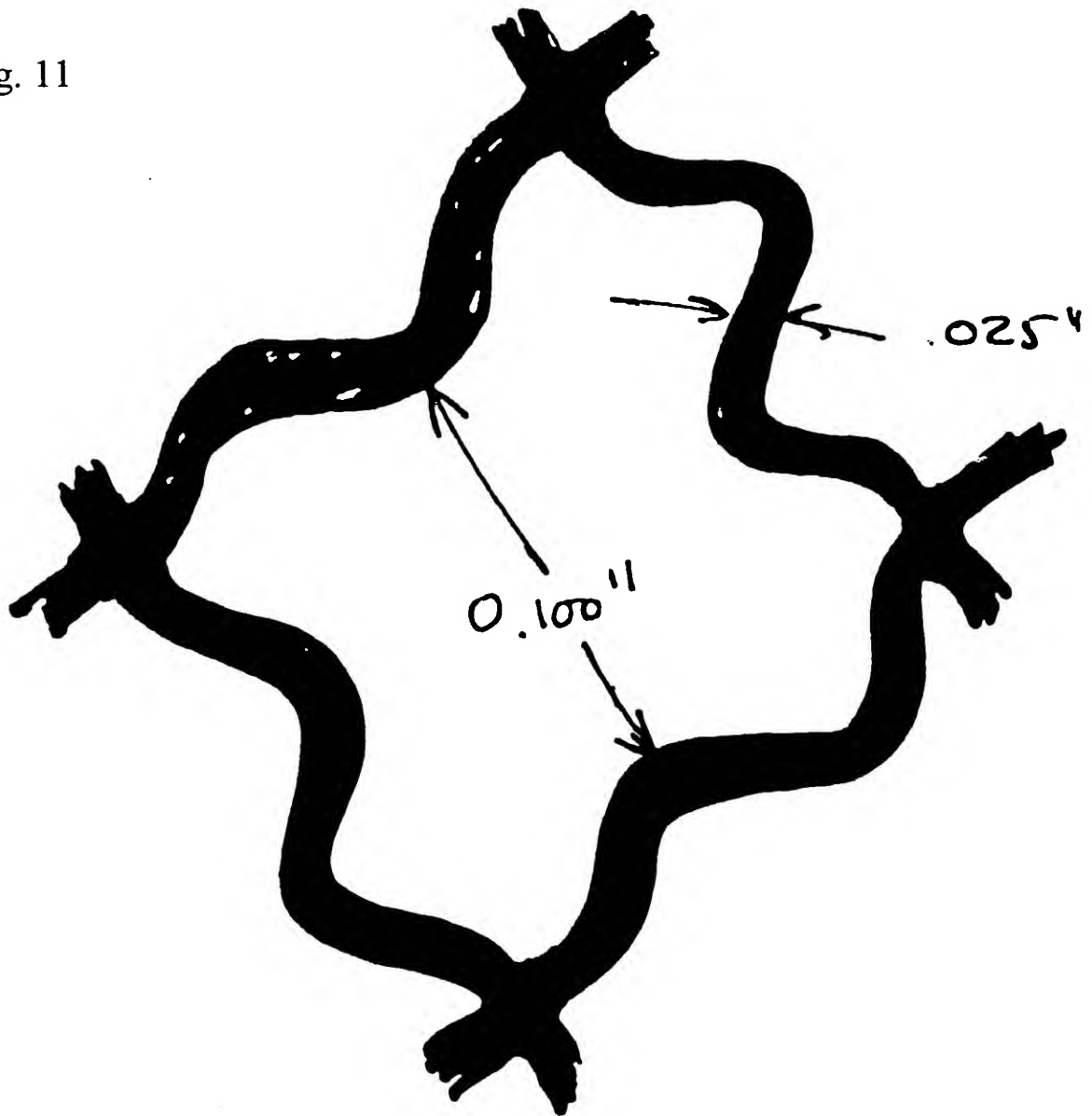


Fig. 12

